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(71)Applicant : KANEBO LTD

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(54) MANUFACTURE OF ELECTRODE FOR BATTERY

(57)Abstract:

PURPOSE: To provide a manufacturing process of an electrode for a battery with less loosening of the interior of the electrode and high shape stability.

CONSTITUTION: An insoluble, infusible base body obtained by heat treatment of an aromatic condensation polymer comprising carbon, hydrogen, and oxygen and having polyacene skeletal structure having an atomic ratio of hydrogen to carbon of 0.05-0.5 is used as a main active material. A molding comprising the granular insoluble, infusible base body having polyacene skeletal structure and a thermosetting resin is heat-treated.

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(22)Date of filing : 30.06.1993

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(54) NONAQUEOUS ELECTROLYTIC SECONDARY BATTERY AND ITS MANUFACTURE

(57)Abstract:

PURPOSE: To provide a new nonaqueous electrolytic secondary battery and its manufacture where the battery is of high voltage and high energy density, excellent in charge/ discharge

characteristics, concurrently durable in cyclic life, and is high in reliability.

CONSTITUTION: In a nonaqueous electrolytic secondary battery composed of a negative electrode, a positive electrode, and at least, of lithium ion conductive nonaqueous electrolyte, silicon oxide containing lithium or silicic acid salt is used as negative electrode active material. The lower silicon oxide is particularly used, which is represented by a composition formula Li_xSiO_y (where, $x \leq 0$, and $2 > y > 0$), and contains lithium. By this constitution, the secondary battery can thereby be obtained, in which negative electrode active material is low in potential, and is a base metal, charge/discharge capacity is high in the potential area of low voltage of 0 to 1V in respect to lithium, moreover, voltage is high, and energy density is also high because polarization (internal resistance) is low at the time of charge/discharge. And furthermore, the battery is excellent in high amperage current charge/discharge characteristics, concurrently is less deteriorated by over charging/over discharging, is durable in cyclic life, and is high in reliability.

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